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Sequence Listing was accepted.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2010; month=4; day=5; hr=9; min=36; sec=11; ms=380; ]

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Application No: 10568691

Version No: 1.0

Input Set:

Output Set:

Started: 2010-03-26 12:10:52.154

Finished: 2010-03-26 12:10:56.031

Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 877 ms

Total Warnings: 0

Total Errors: 13

No. of SeqIDs Defined: 16

Actual SeqID Count: 16

Error code	Error Description
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E 257	Invalid sequence data feature in <221> in SEQ ID (3)
E 257	Invalid sequence data feature in <221> in SEQ ID (4)
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SEQUENCE LISTING

<110> Chroma Therapeutics Limited

Bawden, Lindsay J

Bone, Elizabeth A

Drummond, Alan H

Needham, Lindsey A

<120> Detection of Histone Modification in Cell-free Nucleosomes

<130> NRSCP6244818

<140> 10568691

<141> 2010-03-26

<150> PCT/GB2004/003564

<151> 2004-08-18

<150> GB 0319376.0

<151> 2003-08-18

<160> 16

<170> PatentIn version 3.1

<210> 1

<211> 8

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H3 lys 4 (Me)

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<221> MOD\_RES

<222> (4)..(4)

<223> METHYLATION

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Ala Arg Thr Lys Gln Thr Ala Arg  
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<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H4 arg 3 (Me)

<220>

<221> MOD\_RES

<222> (3)..(3)

<223> METHYLATION

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Ser Gly Arg Gly Lys  
1 5

<210> 3

<211> 5

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H4 lys 5 (Ac)

<220>

<221> MOD\_RES

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<223> ACETYLATION

<400> 3

Ser Gly Arg Gly Lys  
1 5

<210> 4

<211> 5

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H4 arg 3 (Me)/lys 5 (Ac)

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<223> METHYLATION

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<223> ACETYLATION

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Ser Gly Arg Gly Lys  
1 5

<210> 5

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H4 Ser 2(phos)/Arg 3(me)/Lys 5(Ac)

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<223> PHOSPHORYLATION

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Ser Gly Arg Gly Lys  
1 5

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H3 lys 9 (Me)

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Gln Thr Ala Arg Lys Ser Thr Gly Val  
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<212> PRT

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<223> Example of peptide which may be used to generate modified histone  
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<212> PRT

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H3 lys 27 (Me)

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<223> METHYLATION

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Ala Ala Arg Lys Ser Ala Pro Val Cys Gly  
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<223> Example of peptide which may be used to generate modified histone  
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Ser Gly Gly Val Lys Lys Pro His Lys Cys Gly  
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<223> Example of peptide which may be used to generate modified histone  
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<223> METHYLATION

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Arg His Arg Lys Ile Leu Arg Asp Cys Gly  
1 5 10

<210> 11

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<212> PRT

<213> Homo sapiens

<400> 11

Ala Arg Thr Lys Gln Thr Ala Arg Lys Ser Thr Gly Gly Lys Ala Pro  
 1 5 10 15  
 Arg Lys Gln Leu Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ala Thr  
 20 25 30  
 Gly Gly Val Lys Lys Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu  
 35 40 45  
 Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys  
 50 55 60  
 Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr  
 65 70 75 80  
 Asp Leu Arg Phe Gln Ser Ser Ala Val Met Ala Leu Gln Glu Ala Ser  
 85 90 95  
 Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile  
 100 105 110  
 His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg  
 115 120 125  
 Arg Ile Arg Gly Glu Arg Ala  
 130 135

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<211> 102

<212> PRT

<213> Homo sapiens

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Ser Gly Arg Gly Lys Gly Gly Lys Gly Leu Gly Lys Gly Gly Ala Lys  
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 20 25 30  
 Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys Arg Ile Ser Gly  
 35 40 45  
 Leu Ile Tyr Glu Glu Thr Arg Gly Val Leu Lys Val Phe Leu Glu Asn  
 50 55 60  
 Val Ile Arg Asp Ala Val Thr Tyr Thr Glu His Ala Lys Arg Lys Thr  
 65 70 75 80  
 Val Thr Ala Met Asp Val Val Tyr Ala Leu Lys Arg Gln Gly Arg Thr

85

90

95

Leu Tyr Gly Phe Gly Gly  
100

&lt;210&gt; 13

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 13

Ser Gly Arg Gly Lys Gln Gly Gly Lys Ala Arg Ala Lys Ala Lys Thr  
1 5 10 15

Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Val His Arg  
20 25 30

Leu Leu Arg Lys Gly Asn Tyr Ala Glu Arg Val Gly Ala Gly Ala Pro  
35 40 45

Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu  
50 55 60

Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro  
65 70 75 80

Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu  
85 90 95

Leu Gly Lys Val Thr Ile Ala Gln Gly Gly Val Leu Pro Asn Ile Gln  
100 105 110

Ala Val Leu Leu Pro Lys Lys Thr Glu Ser His His Lys Ala Lys Gly  
115 120 125

Lys

&lt;210&gt; 14

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 14

Pro Glu Pro Ser Lys Ser Ala Pro Ala Pro Lys Lys Gly Ser Lys Lys  
1 5 10 15

Ala Ile Thr Lys Ala Gln Lys Lys Asp Gly Lys Lys Arg Lys Arg Ser  
20 25 30

Arg Lys Glu Ser Tyr Ser Ile Tyr Val Tyr Lys Val Leu Lys Gln Val  
35 40 45

His Pro Asp Thr Gly Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser  
50 55 60

Phe Val Asn Asp Ile Phe Glu Arg Ile Ala Gly Glu Ala Ser Arg Leu  
65 70 75 80

Ala His Tyr Asn Lys Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr  
85 90 95

Ala Val Arg Leu Leu Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser  
100 105 110

Glu Gly Thr Lys Ala Val Thr Lys Tyr Thr Ser Ser Lys  
115 120 125

<210> 15

<211> 142

<212> PRT

<213> Homo sapiens

<400> 15

Ser Gly Arg Gly Lys Thr Gly Gly Lys Ala Arg Ala Lys Ala Lys Ser  
1 5 10 15

Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Val His Arg  
20 25 30

Leu Leu Arg Lys Gly His Tyr Ala Glu Arg Val Gly Ala Gly Ala Pro  
35 40 45

Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu  
50 55 60

Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro  
65 70 75 80

Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu  
85 90 95

Leu Gly Gly Val Thr Ile Ala Gln Gly Gly Val Leu Pro Asn Ile Gln  
 100 105 110

Ala Val Leu Leu Pro Lys Lys Thr Ser Ala Thr Val Gly Pro Lys Ala  
 115 120 125

Pro Ser Gly Gly Lys Lys Ala Thr Gln Ala Ser Gln Glu Tyr  
 130 135 140

<210> 16

<211> 135

<212> PRT

<213> Homo sapiens

<400> 16

Ala Arg Thr Lys Gln Thr Ala Arg Lys Ser Thr Gly Gly Lys Ala Pro  
 1 5 10 15

Arg Lys Gln Leu Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ser Thr  
 20 25 30

Gly Gly Val Lys Lys Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu  
 35 40 45

Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys  
 50 55 60

Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr  
 65 70 75 80

Asp Leu Arg Phe Gln Ser Ala Ala Ile Gly Ala Leu Gln Glu Ala Ser  
 85 90 95

Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile  
 100 105 110

His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg  
 115 120 125

Arg Ile Arg Gly Glu Arg Ala  
 130 135

